



VEHICLE MOUNTED OBSTACLE DETECTION DEVELOPMENT

Docklands Light Railway (DLR) is a modern driverless, electrically operated, high frequency urban rail system covering the Docklands area of East and South East London.

DLR is inviting companies to participate in a market engagement, on whether a vehicle mounted obstacle detection system capable of detecting unintended obstacles on the network is feasible.

THE PROJECT

The elicitation, feasibility study, design, manufacture and testing of a prototype Vehicle Mounted Obstacle Detection System (VMODS) on DLR's B2007K fleet, which consists of 55 vehicles. Each B2007 light rail vehicle comprises two light rail cars (Cars A & B) permanently joined via an articulated connection.

The VMODS shall be provided in automatic train operation mode, this is where the train is fully automatic, and shall apply the brakes when it detects an obstacle on track.

The specification of obstacles to be detected shall be defined by a specific task analysis or safety risk assessment and agreed during the design review process. Detection of an obstacle shall be recorded and reported.

The scope of work shall include as follows:

- Development and detailed design of the prototype system
- Engineering of the solution
- Testing including type testing, factory acceptance tests, commissioning and routine tests
- Installation of the prototype system on vehicles
- Documentation of the prototype
- Project management of all stages of the project
- Provision of all labour, supervising resources, equipment, storage, and consumables for installing and testing the prototype on the B2007 fleet.

The installation and testing of the prototype system shall be carried out at DLR's vehicle maintenance facility in either Poplar or Beckton.

Delivery of the prototype system will involve the following key parties:

- Docklands Light Railway Limited (DLRL) – Vehicle Owner; and
- KeolisAmeyDocklands Limited - Vehicle Operator

DLRL and the Vehicle Operator will provide relevant vehicle documentation for the B2007 vehicles, where available, including:

- Mechanical and electrical drawings;
- Technical descriptions; and
- Existing vehicle maintenance instructions.



MARKET ENGAGEMENT APPROACH & INVITATION TO PARTICIPATE

We are intending to undertake an early market engagement to help develop DLR's understanding of the market in this sector, in particular the capability of interested parties to provide innovation through research and development alongside the ability to design, test and install the VMODS on the vehicles.

Our market engagement approach is to publish a Prior Information Notice (PIN) and issue a Market Sounding Questionnaire (MSQ) to suppliers that have made an Expression of Interest (EOI). Any responses provided to the MSQ will be held confidentially and will not be disclosed to any third party unless required by law.

This market engagement would then help inform DLR's intended procurement approach. We will aim to build interest and collate valuable feedback from the market ahead of beginning any related procurement to ensure the market is informed and encouraged to participate.

Submission of Expression of Interest

If you would like to participate in this market engagement, please submit your expression of interest via email to SupplierStrategy@tfl.gov.uk by 5pm on **Friday 28th July 2017**. Please ensure that you state:

- Your organisation name
- Company registration number
- Key Contact name (including email address and telephone number)
- A brief description, 100 words max, of your organisation and services on offer

Terms of the Market Engagement

DLR will manage this process in an open and transparent manner. Interested parties will not be prejudiced by any response or failure to respond to the market engagement exercise. Direct or indirect canvassing of any employee or agent of DLR, TfL or any TfL group company by any company concerning this requirement, or any attempt to procure information from any such employee or agent concerning this PIN outside of the formal process described in this document may result in the disqualification of the company from consideration of any future procurement activity.

This PIN is issued solely for the purposes of the market engagement. No information contained in this document, or provided during and for the market engagement exercise, constitutes any commitment by DLR, TfL or any other member of the TfL group or any of its or their stakeholders to undertake any procurement exercise in the future. This PIN does not constitute a call for competition to procure any services, supplies or works for DLR and DLR is not bound to accept any proposals offered. DLR is not liable for any costs, fees or expenses incurred by any party participating in the market engagement. Any possible future procurement of any services, supplies or works by DLR would be carried out strictly in accordance with the provisions of the applicable Utilities Contracts Regulations.